REMARKS

Claims 1-3 and 5-14 are pending in this application. By this Amendment, claim 1 is amended.

No new matter is added by this Amendment. Support for the amendment to claim 1 can be found in the original specification, specifically at paragraph [0110] on page 41, as well as Samples 1-25, including Sample 3 on page 40 of the specification. More in particular, although the specification does not verbatim describe the range $0.05 \leq z \leq 0.20$, it does describe $0 < z \leq 0.20$, and the Samples include numerous examples of z at 0.05 and 0.20, clearly conveying that Applicants had possession of the range $0.05 \leq z \leq 0.20$ at the time of application. Thus, the amended range finds support in the original specification, and no new matter is added by this Amendment.

I. Rejections under 35 U.S.C. §102(a or e) and/or 35 U.S.C. §103(a)

Claims 1-3 and 5-14 were rejected under 35 U.S.C. §102(a or e) as allegedly being anticipated by, or in the alternative under 35 U.S.C. §103(a) as allegedly being unpatentable over, U.S. Patent No. 6,617,273 (Motoki). Applicants respectfully traverse this rejection.

Motoki does not teach or suggest each and every limitation recited in claim 1 as amended and therefore fails to anticipate the claims. Specifically, Motoki does not teach or suggest a dielectric ceramic composition including at least a main component containing a dielectric oxide having a composition expressed by $[(Ca_xSr_{1-x})O]_m[(Ti_yZr_{1-y-z}Hf_z)O_2]$, a first subcomponent containing a Mn oxide and/or an Al oxide, and a glass component containing at least SiO_2 as a primary component, wherein "m", "x", "y" and "z" indicating composition mole ratios in the formula included in said main component are in relationships of $0.90 \leq m \leq 1.04$, $0.5 \leq x < 1$, $0.01 \leq y \leq 0.10$, and $0.05 \leq z \leq 0.20$. In fact, Motoki discloses ceramic compositions wherein the fraction of Hf (z) is never higher than 0.02.

Further, the product of the present claims demonstrates unexpectedly superior results when compared to the product of Motoki. Comparative Sample 11 of the present specification is representative of Motoki in its having an Hf fraction of 0.01. Sample 3 of the present specification is identical in all respects to Comparative Sample 11, representative of the product of Motoki, except for having an Hf fraction (z) at the low end of the range recited in claim 1 (0.05). See Table 1 of the present specification. Sample 3 demonstrates unexpectedly superior results in all criteria of comparison with Comparative Sample 11. That is, Sample 3 demonstrates unexpected results in permittivity, insulation resistance, capacity change rate and accelerated lifetime compared to Comparative Sample 11. See Table 2 of the present specification.*

The product of the present claims demonstrates unexpected performance with respect to the comparative Sample 11, representative of Motoki. Nothing in Motoki directs one of ordinary skill in the art to increase the amount of Hf for any reason. Further, nothing in Motoki suggests the unexpected advantages from doing so. Thus, Motoki does not anticipate or render obvious the features of the present claims.

For at least the foregoing reasons, Motoki does not teach or suggest the features recited in claim 1, from which claims 2, 3 and 5-14 depend. Reconsideration and withdrawal of the rejection are thus respectfully requested.

---

* Applicants note that, for example, Samples 2, 24, 31, 34, 35, 38 and 40, also within the present claims, appear to perform similar to or slightly more poorly than Comparative Sample 11 for certain properties. However, those samples cannot be directly compared to Comparative Sample 11 because different compositional variables, other than the value of z, are present. The proper comparison is thus between Sample 3 and Comparative Sample 11, as such differ only in the value of z as discussed above.

II. Rejection under 35 U.S.C. §103(a)

Claims 1-3 and 5-14 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 6,118,648 (Kojima) in view of Motoki. Applicants respectfully traverse this rejection.

Kojima does not teach or suggest the features recited in claim 1. Specifically, Kojima does not teach or suggest a dielectric ceramic composition including at least a main component containing a dielectric oxide having a composition expressed by $[(Ca_xSr_{1-x})O]_m[(Ti_yZr_{1-y-z}Hf_z)O_2]$, a first subcomponent containing a Mn oxide and/or an Al oxide, and a glass component containing at least SiO_2 as a primary component, wherein "m", "x", "y" and "z" indicating composition mole ratios in the formula included in said main component are in relationships of $0.90 \leq m \leq 1.04$, $0.5 \leq x < 1$, $0.01 \leq y \leq 0.10$, and $0.05 \leq z \leq 0.20$. In fact, Kojima does not teach or suggest a dielectric ceramic composition comprising Hf at any level.

Motoki does not remedy the deficiencies of Kojima. Specifically, Motoki also does not teach or suggest a ceramic dielectric composition comprising Hf at a fraction wherein $0.05 \leq z \leq 0.20$. As detailed above, Motoki does not teach or suggest a composite having the unexpected superior results of permittivity, insulation resistance, capacity change rate and accelerated lifetime with a composition having $0.05 \leq z \leq 0.20$. Therefore, even if the teachings of Kojima and Motoki were to have been combined in the manner alleged by the Patent Office, the features of claim 1 and the dependent claims would not have been achieved.

For the foregoing reasons, Kojima and Motoki, alone or in combination, do not teach or suggest the features of claim 1, from which claims 2, 3 and 5-14 depend. Reconsideration and withdrawal of the rejection are thus respectfully requested.

III. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-3 and 5-14 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

James A. Oliff
Registration No. 27,075

Denis A. Backer
Registration No. 58,988

JAO:DAB/hs

Date: August 15, 2007

OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

DEPOSIT ACCOUNT USE AUTHORIZATION
Please grant any extension necessary for entry;
Charge any fee due to our Deposit Account No. 15-0461